

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A method of identifying a characteristic of interest represented by a textual input, comprising:

building a graph with nodes and links corresponding to the textual input, a pair of nodes and a link between the nodes comprising a tuple;

scoring sub-graph components of the graph by assigning a score to each node and each tuple in the graph, the score for each tuple being based on a score of an initial node in the tuple, scores for nodes linking to a target node in the tuple, and a frequency of the tuple in the textual input;

identifying graph fragments of interest based on the scores; and

performing text manipulation based on the identified graph fragments.

2. (Canceled.)

3. (Currently Amended) The method of claim ~~2~~1 wherein the nodes correspond to words in the textual input or concepts represented by the textual input.

4. (Previously Presented) The method of claim 3 wherein building the graph further comprises generating the links as directed semantic relation names.

5. (Previously Presented) The method of claim 4 wherein building the graph further comprises generating a set of abstract analyses for the textual input.

6. (Previously Presented) The method of claim 5 wherein generating a set of abstract analyses comprises:

generating a set of directed acyclic graphs based on the textual input; and
connecting the set of directed acyclic graphs to one another.

7. (Currently Amended) The method of claim ~~2~~1 wherein building the graph comprises:
generating a syntactic parse for text portions in the textual input;
generating a dependency structure from the syntactic parse; and
generating the graph from the syntactic parse.
8. (Currently Amended) The method of claim ~~2~~1 wherein building the graph comprises:
identifying the nodes as adjacent or collocated words; and
identifying the links between the nodes.
9. (Previously Presented) The method of claim 8 wherein identifying the links comprises:
assigning directionality of the links arbitrarily.
10. (Previously Presented) The method of claim 8 wherein identifying the links comprises
identifying the links and assigning directionality of the links based on a given part-of-speech
associated with the nodes, using a heuristic.
11. (Previously Presented) The method of claim 8 wherein identifying the links comprises
identifying the links and assigning directionality of the links based on a given part-of-speech
associated with the nodes, using a machine learned method.
12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Currently Amended) The method of claim ~~13~~1 wherein identifying graph fragments of
interest comprises:

matching sub-graph components of the graph to nodes and tuples having a sufficient score.

16. (Previously Presented) The method of claim 15 wherein identifying graph fragments of interest comprises:

identifying nodes, having a sufficient score, that are linked to the matched sub-graph components.

17. (Previously Presented) The method of claim 16 wherein identifying graph fragments comprises:

identifying a node outside a matched sub-graph component that has a predetermined relation to a node in the matched sub-graph component.

18. (Previously Presented) The method of claim 17 wherein identifying graph fragments comprises:

identifying certain relations, given a predetermined specific node type.

19. (Previously Presented) The method of claim 18 wherein all the matched sub-graph components and identified nodes and relations comprise the graph fragment.

20. (Previously Presented) The method of claim 19 wherein performing text manipulation comprises:

extracting the set of sub-graph components identified for a given portion of the textual input as a graph fragment.

21. (Previously Presented) The method of claim 20 wherein building a graph comprises:

generating a separate graph for each sentence in the textual input; and
connecting the separate graphs together to form an overall graph.

22. (Previously Presented) The method of claim 21 wherein extracting comprises:
extracting sub-graph portions, that have a sufficient score, from the overall graph.
23. (Previously Presented) The method of claim 21 wherein high scoring sub-graph portions of the overall graph comprise sub-graph portions of the overall graph that have a score that meets a threshold score value, and wherein extracting sub-graph portions comprises:
extracting portions of the separate graphs that spawned the high scoring sub-graph portions of the overall graph.
24. (Previously Presented) The method of claim 1 wherein performing text manipulation comprises one of summarization, information retrieval, question answering, document clustering, and indexing.
25. (Previously Presented) The method of claim 1 wherein performing text manipulation comprises: generating a textual output based on the extracted graph fragments.
26. (Previously Presented) The method of claim 1 and further comprising:
ordering the graph fragments based on scores corresponding to the graph fragments.
27. (Previously Presented) The method of claim 26 wherein ordering further comprises:
ordering the graph fragments based on factors in addition to the scores.
28. (Previously Presented) The method of claim 27 wherein the factors comprise one of placement of nodes and the order in which two nodes related through part of speech will occur, an event timeline determined from the textual input, and a topic determined for the textual input.

29. (Cancelled) The method of claim 1 wherein the characteristic of interest comprises one of words, text fragments, concepts, events, entities, and topics.

30. (Currently Amended) A method of identifying a characteristic of interest comprising one of words, text fragments, concepts, events, entities and topics, said characteristic of interest represented by a textual input, said method comprising:

building a graph comprising nodes linked by links corresponding to the textual input;

scoring sub-graph components of the graph;

identifying graph fragments of interest based on the scores; and

ordering the graph fragments based on factors in addition to the scores, the factors

comprising at least one of placement of nodes and an order in which two nodes

related through part-of-speech will occur, an event timeline determined from the

textual input, and a topic determined for the textual input; and

performing text manipulation based on the identified graph fragments.